

and N-vinylmethacrylamide, polydiallyldimethylammonium chloride, polyethyleneimine and mixtures thereof. The molar masses of these polymers are preferably from 1500 to 50,000.

IN THE CLAIMS

Please amend the claims as follows:

B3 1. (Amended) An aqueous dispersion of a water-soluble polymer of N-vinylformamide and/or of N-vinylacetamide, wherein the dispersion contains, based on 100 parts by weight of water,

B1 (A) from 5 to 80 parts by weight of a water-soluble polymer containing N-vinylformamide units and/or N-vinylacetamide units and having a particle size of from 50 nm to 2 μ m

(B) from 1 to 50 parts by weight of at least one polymeric dispersant which is selected from the group consisting of carboxymethylcellulose, water-soluble starch, starch esters, starch xanthogenates, starch acetates, dextran, polyalkylene glycols, polyvinyl acetate, polyvinyl alcohol, polyvinylpyrrolidone, polyvinylpyridine, polyethyleneimine, polyvinylimidazole, polyvinylsuccinimide, a 1:1 molar ratio copolymer of N-vinylcaprolactam and N-vinylacetamide, and polydiallyldimethylammonium chloride,

the aqueous dispersion being substantially free of stabilizing inorganic salt.

B2 5. (Amended) A process for the preparation of an aqueous dispersion of a water-soluble polymer of N-vinylformamide and/or of N-vinylacetamide, wherein

(A) from 5 to 80 parts by weight of monomers comprising N-vinylformamide and/or N-vinylacetamide, with or without other monoethylenically unsaturated monomers, which form water-soluble polymers therewith, and

(B) from 1 to 50 parts by weight of at least one polymeric dispersant which is selected from the group consisting of carboxymethylcellulose, water-soluble starch, starch esters, starch xanthogenates, starch acetates, dextran, polyalkylene glycols, polyvinyl acetate, polyvinyl alcohol, polyvinylpyrrolidone, polyvinylpyridine, polyethyleneimine, polyvinylimidazole, polyvinylsuccinimide, a 1:1 molar ratio copolymer of N-vinylcaprolactam and N-vinylmethylacetamide, and polydiallyldimethylammonium chloride,

in 100 parts by weight of water substantially free of stabilizing inorganic salts, are subjected to free radical polymerization at from 30 to 95°C in the presence of from 0.001 to 5.0% by weight, based on the monomers used, of a polymerization initiator which forms free radicals under the polymerization condition, the ratio of the components (A) and (B) being so selected that the polymerization results in dispersions at 50 nm to 2 µm sized particles of the water soluble polymer in water.

B2
contd

6. (Amended) A process as claimed in claim 5, wherein

(A) from 10 to 50 parts by weight of monomers comprising N-vinylformamide and/or vinylacetamide, with or without other monoethylenically unsaturated monomers which form water-soluble polymers therewith, and

(B) from 5 to 40 parts by weight of at least one polymeric dispersant,

in 100 parts by weight of water, are polymerized at from 40 to 70°C with from 0.5 to 2.0% by weight, based on the monomers used in the polymerization, of an azo compound which decomposes into free radicals under the polymerization conditions.

7. (Amended) A process as claimed in claim 5, wherein the polymeric dispersant (B) used, is selected from the group consisting of polyethylene glycol, polypropylene glycol, copolymers of ethylene glycol and propylene glycol, polyvinyl acetate, polyvinyl alcohol,

polyvinylpyridine, polyvinylimidazole, polyvinylsuccinimide, a 1:1 molar ratio copolymer of N-vinylcaprolactam and N-vinylmethylacetamide, polydiallyldimethylammonium chloride, polyethyleneimine and mixtures thereof.

8. (Amended) A process as claimed in claim 5 wherein

(A) N-vinylformamide, with or without other monoethylenically unsaturated monomers, and

(B) polyethylene glycol, polyvinylpyrrolidone or mixtures thereof are polymerized at from 40 to 55°C with a water-soluble azo initiator.

Please add the following claims:

9. (New) A process as claimed in claim 6, wherein

(A) N-vinylformamide, with or without other monoethylenically unsaturated monomers, and

(B) polyethylene glycol, polyvinylpyrrolidone or mixtures thereof are polymerized at from 40 to 55°C with a water-soluble azo initiator.

10. (New) A process as claimed in claim 7, wherein

(A) N-vinylformamide, with or without other monoethylenically unsaturated monomers, and

(B) polyethylene glycol, polyvinylpyrrolidone or mixtures thereof are polymerized at from 40 to 55°C with a water-soluble azo initiator.

REMARKS

Claims 9 and 10 are added. Claims now in the application are 1-10.